REMARKS

The above amendments and these remarks are responsive to the Office action dated June 16, 2004. Claims 1-11 are pending in the application. In the Office action, the Examiner objected to claims 7-8, rejected claims 1-2, 6-8 and 10-11 under 35 U.S.C. 102(e), and rejected claims 3-5 and 9 under 35 U.S.C. 103(a). In view of the amendments above, and the remarks below, applicant respectfully requests reconsideration of the application under 37 C.F.R. § 1.111 and allowance of the pending claims.

Rejection of Claims 1-2, 6-8 and 10 under 35 USC § 102(a)

Claims 1-2, 6-8 and 10 stand rejected under § 102(e) as being anticipated by Kennedy. Claims 7-9 have been amended to be consistent with claim 6 in response to paragraph 1 of the Office action. Claim 10 has also been amended for consistency.

Independent claims 1, 6, and 10 are drawn to a system or method for cutting material, including a pusher for pushing a work piece down a processing path, where a computer is configured to calculate the length of a work piece based on the position of the pusher when the end of the work piece is sensed by a sensor. Claims 2, 6-8 and 10 further include that once the length of the work piece has been calculated based on the position of the pusher, the computer automatically calculates a plan for optimal cutting of the work piece. The Examiner asserts that Kennedy discloses "operating a pusher to push a work piece along a processing path" and "determining the length of the work piece based on the position of the pusher when the end is sensed." Applicants respectfully disagree.

Kennedy discloses a method for curve sawing lumber from workpieces according to an optimized profile. The Kennedy method includes using a scanner 14, which:

> "samples the workpiece 12 profile and provides the raw profile measurement information to a processor 24 known as an optimizer," which "employs an optimizing algorithm to smooth the data and generate a mathematical model of the workpiece...The result is an optimized cutting solution decision by the optimizer..." (Column 11, lines 16-25).

An example of the mathematical model generated by the optimizing algorithm is shown in Fig. 1a. However, the Kennedy device does not use a pusher to align the workpiece relative to the scanner, nor is the length of the workpiece calculated based on the position of a pusher when the end of the workpiece is sensed by a sensor.

Kennedy further discloses that after the cutting solution has been generated, motion controllers operate on position cams to control the X axis (feed direction) and Y axis of the saws relative to the workpiece. (Column 11, lines 41-60). Specifically, "[t]he X-axis position is provided by the mill flow infeed devices such as transfer chains, sharp chains, belts, rolls, or the like generically referred to as feedworks 42." (Column 11, lines 56-60). Kennedy discloses that the mechanism of synchronizing the workpiece for cutting occurs as follows:

> "[t]he workpiece is fed longitudinally on the feedworks with its orientation maintained such as by press roles while it is translated towards and through the sawbox. An infeed photoeye (I/F PE) 45 may be used to sense the location of a workpiece 12 on the feedwork 42 to time raising and lowering of the press roles into engagement with the workpiece so as to hold the workpiece against the feed conveyor...Synchronization of the workpiece with the position cam data is facilitated by a synchronization photoeye (SYNC PE) 46 which detects the longitudinal ends of the workpiece as it is being translated on the feedworks 42 in the mill flow direction. The workpiece is synchronized so that the position cam position targets for the cutting devices correspond to their intended locations on the workpiece." (Column 12, lines 10-30)

Accordingly, Kennedy fails to teach or suggest use of a pusher. Kennedy uses feedworks such as chains, belts or rollers. Moreover, Kennedy does not teach or suggest use of a sensor and pusher position to calculate the length of a workpiece. In contrast, Kennedy uses sensors (photoeyes) "to sense the location of a workpiece 12 on the feedwork 42 to time raising or lowering of the press roles into engagement with the workpiece so as to hold the workpiece against the feed conveyor." No length determination is made, as recited in the independent claims.

Kennedy does not disclose a pusher for pushing a work piece down a processing path, where a computer is configured to calculate the length of a work piece based on the position of the pusher when the end of the work piece is sensed by a sensor. Therefore, claims 1-2, 6-8 and 10 are allowable for at least the reasons stated above.

Rejection of Claim 11 under 35 USC § 102(a)

Claim 11, which has been amended for consistency, also stands rejected under § 102(e) as being anticipated by Kennedy. Claim 11 is directed to a method for cutting material, including virtually marking a defect on the workpiece, and automatically calculating a plan for optimal cutting of the work piece to fulfill cut list requirements based on the length of the work piece and location of the defect. The Examiner asserts that Kennedy discloses "inputting location of a defect in the workpiece into the computer prior to the calculating step (Fig. 3)." Applicants respectfully disagree.

Kennedy discloses a method for curve sawing lumber from workpieces according to an optimized profile. At no point does Kennedy disclose inputting the location of a defect in the workpiece. In fact, Kennedy never discusses defects in the workpiece at

all. Even Fig. 3, which the Examiner said discloses "inputting location of a defect" does not mention defects in the workpiece. Therefore, claim 11 is allowable. It should be further noted that claim 10 includes the step of "inputting the location of a defect in the work piece into the computer," and is therefore also allowable for this reason.
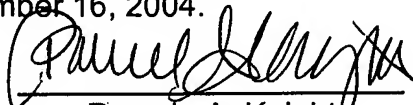
Rejections under 35 USC § 103(a)

Claims 3-5 and 9 stand rejected under § 103(a) as being unpatentable over Kennedy in view of Hurdle Jr. (U.S. Patent 5,201,351). Claims 3-5 depend from claim 1 and are therefore allowable for at least the reasons stated above because Kennedy and Hurdle, alone or together, fail to teach or suggest calculation of a workpiece length based on a detector and pusher location. As amended, claim 9 depends from claim 6, and is therefore allowable for at least the reasons stated above.

Applicant believes that this application is now in condition for allowance, in view of the above amendments and remarks. If the Examiner has any questions, or if a telephone interview would in any way advance prosecution of the application, please contact the undersigned attorney of record.

CERTIFICATE OF MAILING   Respectfully submitted,

I hereby certify that this correspondence   KOLISCH HARTWELL, P.C.
is being deposited with the United States
Postal Service as first class mail, postage
prepaid, to: Mail Stop AMENDMENT,   Pierre C. Van Rysselberghe
Commissioner for Patents, P.O. Box   Registration No. 33,557
1450, Alexandria, Virginia 22313-1450 on Customer No. 23581
December 16, 2004.   of Attorneys for Applicants
                                          520 S.W. Yamhill Street, Suite 200
                                          Portland, Oregon 97204
      Pamela A. Knight   Telephone: (503) 224-6655
                                          Facsimile: (503) 295-6679